

REMARKS

This Application has been carefully reviewed in light of the Office Action mailed June 18, 2004 (the "Office Action"). Applicants respectfully request reconsideration and favorable action in this case.

Claim Objections

The Office Action objects to Claims 1, 3-9, 11-17 and 19-24. The Office Action suggests that in independent Claims 1, 9 and 17 "higher speed" should be --lower speed--." Office Action, page 2. However, Applicants note that Claims 1, 9 and 17 recite that intra RTP (receiver transmitter pair) connections have a higher speed than connections between RTPs and that Applicants' Specification includes an embodiment in which intra RTP 100 connections have a higher speed than inter RTP 100 connections. *See, e.g.*, Specification, page 16, lines 18-21. Thus, Applicants respectfully submit that the Examiner withdraw the objections to Claims 1, 3-9, 11-17 and 19-24.

Section 103 Rejections

The Office Action rejects Claims 1, 3-6, 9, 11-14, 17, and 19-22 under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 5,483,522 to Derby et al. ("Derby") in view of U.S. Patent No. 5,432,783 to Ahmed et al. ("Ahmed") and in view of U.S. Patent No. 6,529,300 to Milton et al. ("Milton") .

Claim 1 recites a network node having receiver transmitter pairs (RTPs) each comprising intra RTP connections between internal RTP components having a higher speed than asymmetric connections between the RTPs, the internal RTP components comprising an optical receiver and an optical transmitter for interfacing with a wavelength division multiplex (WDM) system; determining an intranode connectivity between the RTPs; and distributing a model of the node indicative of the intranode connectivity to a disparate node in the network. Claims 9 and 17 recite similar elements. The Office Action suggests that *Derby, Ahmed* and *Milton* in combination disclose these elements. However, neither *Derby, Ahmed* nor *Milton* disclose, teach or suggest, alone or in combination, a node having intra RTP connections between RTP components having a higher speed than asymmetric

connections between the RTPs. *Derby* discloses nodes having intranode links connecting subnodes of a node. *Derby* states that the intranode links connect two "switching mechanisms." *Derby*, col. 4, lines 4-7. However, none of the cited references used in the rejections even discuss intra RTP connections of a node between RTP components. In addition, neither *Derby*, *Ahmed* nor *Milton* disclose, teach or suggest, alone or in combination, determining an intranode connectivity between the RTPs and distributing a model of the node indicative of the intranode connectivity between the RTPs to a disparate node in the network.

The Office Action also attempts to combine *Derby*, *Ahmed* and *Milton* in the rejection of Claims 1, 9 and 17. Applicants maintain that the combination of *Derby* and *Ahmed* is improper for the reasons discussed in previous submissions to the Examiner. In addition, the Office Action states that *Derby* in view of *Ahmed* "does not disclose a connection to a WDM system nor that the intranodal links are at a lower speed than the internodal links." Office Action, page 3. The Office Action additionally states that:

Milton discloses a node of a network (Figure 1) having intranodal connectivity (Figure 3, items 14 and 15). The node comprises an internal interface (items 14) to a WDM system (items 2 and 3) and the internal links inherently have a lower speed than the links between the nodes (items 10-11 and 18-19); note: multiplexing and demultiplexing). Therefore, it would have been obvious to one skilled in the art at the time the invention was made to provide an interface to a WDM system in the invention of *Derby* in order to provide network connectivity using a well-known and widely used protocol for efficiently transmitting data over fiber.

Office Action, page 3. As indicated above, no reference used in the rejection, including *Milton*, discloses, teaches or suggests intra RTP connections of a node between RTP components having a higher speed than asymmetric connections between the RTPs of the node. Moreover, merely providing "an interface to a WDM system in the invention of *Derby*" does not anticipate internal RTP components comprising an optical receiver and an optical transmitter for interfacing with a WDM system, since *Derby* does not disclose, teach or suggest internal RTP components comprising an optical receiver and an optical transmitter.

Applicants additionally note that the Examiner has not shown the required teaching, suggestion, or motivation in the prior art to combine *Milton* with the other cited references in the manner the Examiner proposes. Applicants respectfully submit that the Examiner's conclusory assertion that it would have been obvious to combine *Milton* with the other cited references to arrive at Applicants' invention is entirely insufficient to support a *prima facie* case of obviousness under 35 U.S.C. § 103(a) under the M.P.E.P. and the governing Federal Circuit case law.

The question raised under 35 U.S.C. § 103 is whether the prior art taken as a whole would suggest the claimed invention taken as a whole to one of ordinary skill in the art at the time of the invention. Accordingly, even if all elements of a claim are disclosed in various prior art references, which is certainly not the case here as discussed above, the claimed invention taken as a whole cannot be said to be obvious without some reason given in the prior art why one of ordinary skill at the time of the invention would have been prompted to modify the teachings of a reference or combine the teachings of multiple references to arrive at the claimed invention. It is clear based at least on the many distinctions discussed above that the prior art does not, taken as a whole, suggest the claimed invention, taken as a whole. Applicants respectfully submit that the Examiner has merely supplied the limitations missing from *Derby* to reconstruct Applicants' claims.

The M.P.E.P. sets forth the strict legal standard for establishing a *prima facie* case of obviousness based on modification or combination of prior art references. "To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references where combined) must teach or suggest all the claim limitations." M.P.E.P. § 2142, 2143. The teaching, suggestion, or motivation for the modification or combination and the reasonable expectation of success must both be found in the prior art and cannot be based on an applicant's disclosure. *See Id.* (citations omitted). "Obviousness can only be established by combining or modifying the teachings of the prior art to produce the

claimed invention where there is some teaching, suggestion, or motivation to do so found either explicitly or implicitly in the references themselves or in the knowledge generally available to one of ordinary skill in the art" at the time of the invention. M.P.E.P. § 2143.01. Even the fact that references *can* be modified or combined does not render the resultant modification or combination obvious unless the prior art teaches or suggests the desirability of the modification or combination. *See Id.* (citations omitted). Moreover, "To establish *prima facie* obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art. All words in a claim must be considered in judging the patentability of that claim against the prior art." M.P.E.P. § 2143.03 (citations omitted).

The governing Federal Circuit case law makes this strict legal standard even more clear.¹ According to the Federal Circuit, "a showing of a suggestion, teaching, or motivation to combine or modify prior art references is an essential component of an obviousness holding." *In re Sang-Su Lee*, 277 F.3d 1338, 1343, 61 U.S.P.Q.2d 1430, 1433 (Fed. Cir. 2002) (quoting *Brown & Williamson Tobacco Corp. v. Philip Morris Inc.*, 229 F.3d 1120, 1124-25, 56 U.S.P.Q.2d 1456, 1459 (Fed. Cir. 2000)). "Evidence of a suggestion, teaching, or motivation . . . may flow from the prior art references themselves, the knowledge of one of ordinary skill in the art, or, in some cases, the nature of the problem to be solved." *In re Dembiczaik*, 175 F.3d 994, 999, 50 U.S.P.Q.2d 1614, 1617 (Fed. Cir. 1999). However, the "range of sources available . . . does not diminish the requirement for actual evidence." *Id.* Although a prior art device "may be capable of being modified to run the way the apparatus is claimed, there must be a suggestion or motivation in the reference to do so." *In re Mills*, 916 F.2d at 682, 16 U.S.P.Q.2d at 1432. *See also In re Rouffet*, 149 F.3d 1350, 1357, 47 U.S.P.Q.2d 1453, 1457-58 (Fed. Cir. 1998) (holding a *prima facie* case of obviousness not made where the combination of the references taught every element of the claimed invention but did not provide a motivation to combine); *In Re Jones*, 958 F.2d 347, 351, 21 U.S.P.Q.2d 1941, 1944 (Fed. Cir. 1992) ("Conspicuously missing from this record is any evidence, other than the PTO's speculation (if that can be called evidence) that one of ordinary skill in the herbicidal art would have been motivated to make the modification of the prior art salts necessary to arrive at" the claimed invention.). Even a determination that it would have been

obvious to one of ordinary skill in the art at the time of the invention to try the proposed modification or combination is not sufficient to establish a *prima facie* case of obviousness. See *In re Fine*, 837 F.2d 1071, 1075, 5 U.S.P.Q.2d 1596, 1599 (Fed. Cir. 1988).

In addition, the M.P.E.P. and the Federal Circuit repeatedly warn against using an applicant's disclosure as a blueprint to reconstruct the claimed invention. For example, the M.P.E.P. states, "The tendency to resort to 'hindsight' based upon applicant's disclosure is often difficult to avoid due to the very nature of the examination process. However, impermissible hindsight must be avoided and the legal conclusion must be reached on the basis of the facts gleaned from the prior art." M.P.E.P. § 2142. The governing Federal Circuit cases are equally clear. "A critical step in analyzing the patentability of claims pursuant to [35 U.S.C. § 103] is casting the mind back to the time of invention, to consider the thinking of one of ordinary skill in the art, guided only by the prior art references and the then-accepted wisdom in the field. . . . Close adherence to this methodology is especially important in cases where the very ease with which the invention can be understood may prompt one 'to fall victim to the insidious effect of a hindsight syndrome wherein that which only the invention taught is used against its teacher.'" *In re Kotzab*, 217 F.3d 1365, 1369, 55 U.S.P.Q.2d 1313, 1316 (Fed. Cir. 2000) (citations omitted). In *In re Kotzab*, the Federal Circuit noted that to prevent the use of hindsight based on the invention to defeat patentability of the invention, the court requires the Examiner to demonstrate a sufficient motivation to modify or combine the references that allegedly create the case of obviousness. See *id.* See also, e.g., *Grain Processing Corp. v. American Maize-Products*, 840 F.2d 902, 907, 5 U.S.P.Q.2d 1788, 1792 (Fed. Cir. 1988). Similarly, in *In re Dembicza*k, the Federal Circuit reversed a finding of obviousness by the Board, explaining that the required evidence of such a teaching, suggestion, or motivation is essential to avoid impermissible hindsight reconstruction of an applicant's invention:

Our case law makes clear that the best defense against the subtle but powerful attraction of hind-sight obviousness analysis is *rigorous application of the requirement for a showing of the teaching or motivation to combine prior art references*. Combining prior art references without evidence of such a

¹ Note M.P.E.P. 2145 X.C. ("The Federal Circuit has produced a number of decisions overturning obviousness rejections due to a lack of suggestion in the prior art of the desirability of combining references.").

suggestion, teaching, or motivation simply takes the inventor's disclosure as a blueprint for piecing together the prior art to defeat patentability—the essence of hindsight.

175 F.3d at 999, 50 U.S.P.Q.2d at 1617 (emphasis added) (citations omitted).

It would not have been obvious to one of ordinary skill in the art at the time of the invention, based solely on the prior art, *to even attempt* to incorporate into the system disclosed in *Derby* the Examiner's proposed combination of *Milton* and *Ahmed*. Even more clearly, it certainly would not have been obvious to one of ordinary skill in the art at the time of the invention, based solely on the prior art, *to actually* incorporate into the system disclosed in *Derby* the Examiner's proposed *Derby-Ahmed-Milton* combination, which would be required to establish a *prima facie* case of obviousness under the M.P.E.P. and the governing Federal Circuit case law.

The Examiner states that the proposed combination of *Milton* into *Derby-Ahmed* would have been obvious "in order to provide network connectivity using a well-known and widely used protocol for efficiently transmitting data over fiber." However, this is not an adequate motivation to combine these references. For example, there is no disclosure to even suggest using in *Derby* optical receivers or transmitters for interfacing with a WDM system. In addition, the Office Action fails to cite any portion of the prior art as teaching the motivation.

Accordingly, since the prior art fails to provide the required teaching, suggestion, or motivation to properly combine *Derby*, *Ahmed* and *Milton* in the manner the Examiner proposes, Applicants respectfully submit that the Examiner's conclusions set forth in the final Office Action fall well short of the requirements set forth in the M.P.E.P. and the governing Federal Circuit case law for demonstrating a *prima facie* case of obviousness. Thus, Applicants respectfully submit that the Examiner's proposed combinations appear to be merely an attempt, with the benefit of hindsight, to reconstruct Applicants' claims and are unsupported by the teachings of the cited art.. Applicants respectfully submit that the rejection must therefore be withdrawn.

For at least these reasons, Applicants respectfully submit that independent Claims 1, 9 and 17 are patentable over the cited art used in the rejections and respectfully request that the rejections of Claims 1, 9 and 17 be withdrawn.

Claims 3-8 depend from Claim 1, Claims 11-16 depend from Claim 9 and Claims 19-24 depend from Claim 17. Applicants thus respectfully request that the rejection of Claims 3-8, 11-16 and 19-24 be withdrawn.

CONCLUSION

Applicants have made an earnest attempt to place this case in condition for allowance. For at least the foregoing reasons, Applicants respectfully request full allowance of all the pending claims.

If the present application is not allowed and/or if one or more of the rejections is maintained, Applicants hereby request a telephone conference with the Examiner and further request that the Examiner contact the undersigned attorney to schedule the telephone conference.

Applicants believe no fees are due. However, should there be a fee discrepancy, the Commissioner is hereby authorized to charge any fees or credit any overpayments to Deposit Account No. 02-0384 of Baker Botts L.L.P.

Respectfully submitted,

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